

## CLAIMS

What is claimed is:

1. A method of separating a sample containing blood cells into a cell containing portion and a substantially cell depleted portion, comprising:  
receiving the sample in a vessel;  
combining the sample, an additive, and a plurality of particles, each of the additive, the particles and the cells having a substantial binding to another of the additive, the particles and the cells to produce a cell containing network; and  
separating the network from the substantially cell depleted portion at least in part using a magnetic force.
2. The method of claim 1 wherein the sample received in the vessel has a volume of more than about 3 ml.
3. The method of claim 1 wherein the sample received in the vessel has a volume of less than about 1 ml.
4. The method of claim 1 wherein the vessel has at least one flexible wall.
5. The method of claim 1 wherein the vessel has multiple samples wells.
6. The method of claim 1 wherein the particles having a mean volume of between about  $5 \times 10^{-24} \text{ m}^3$  to about  $5 \times 10^{-6} \text{ m}^3$ .
7. The method of claim 1 wherein the substantial binding of the particles results at least in part from the particles having a coating.
8. The method of claim 7 wherein the coating comprises an anti-ligand.
9. The method of claim 7 wherein the coating comprises an antibody.
10. The method of claim 7 wherein the coating comprises a polymer.

11. The method of claim 1 wherein the substantial binding of the additive results at least in part from the additive comprising an anti-ligand.
12. The method of claim 1 wherein the network comprises a primary and a secondary antibody, where the primary antibody has a substantial binding to the surface component of the cells and the secondary antibody has a substantial binding to the primary antibody.
13. The method of claim any of claims 1-12 wherein the cells predominantly comprise red blood cells. *a*
14. The method of claim any of claims 1 - 12 wherein the sample includes white blood cells and platelets.
15. The method of any of claims 1 - 12, further comprising measuring PSA.
17. The method of any of claims 1 - 12 wherein at least 70% by volume of the theoretically available cell depleted portion is separated from the network within ten minutes.
18. The method of any of claims 1 - 12 wherein separating the network produces a separation efficiency of at least 70%.
19. The method of any of claims 1 - 12 wherein separating the network produces a separation efficiency of at least 80%.
20. The method of any of claims 1 - 12 wherein separating the network produces a separation efficiency of at least 90%.
21. The method of any of claims 1 - 12 wherein at least 90% by volume of the theoretically available cell depleted portion is separated from the network within ten minutes, with a separation efficiency of at least 95%. *a*